

**REMARKS**

This application has been reviewed in light of the Office Action mailed on April 18, 2005. Claims 1-18 are pending in the application. By the present amendment, Claims 1, 10 and 14 have been amended. No new matter or issues are believed to be introduced by the amendments.

**Double Patenting**

In the Office Action, the Examiner rejected Claims 1-18 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1, 2 and 6-8 of co-pending Application No. 10/056,096. Claim 1 of the present application, as well as Claim 1 of the co-pending application, have been amended in a manner which is believed to obviate the provisional obviousness-type double patenting rejection over Claims 1, 2 and 6-8 of co-pending Application No. 10/056,096. Accordingly, withdrawal of the provisional obviousness-type double patenting rejection with respect to Claims 1-18 of the present application is respectfully requested.

**35 U.S.C. § 102 (b)**

In the Office Action, Claims 1-4, 7-13, and 16-18 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,114,996A – Ngheim. Claim 1 has been amended to better define Applicants' invention and to overcome the cited rejection.

Claim 1 now recites:

1. A wireless terminal comprising a ground conductor housing having predetermined dimensions and a transceiver housed by said ground conductor housing and coupled to an antenna feed,

wherein the antenna feed is coupled to the ground conductor housing in a predetermined manner such that a change in said predetermined dimensions of said ground conductor housing results in a change in the bandwidth of said wireless terminal,

wherein said ground conductor housing is coupled to said antenna feed via a parallel plate capacitor formed by a plate and a surface of said ground conductor housing, said plate having a non-resonant length substantially less than a wavelength. [Emphasis Added]

Ngheim is directed to an increased bandwidth patch antenna which includes first and second arms spaced by an air gap – See Ngheim at Col. 2, lines 14-21. By contrast, the present invention is directed to a capacitive feed antenna. The features that distinguish a patch antenna from a capacitive feed antenna are that a patch antenna is generally of a length such that at the operating frequencies it is self-resonant. Ngheim illustrates in Fig.1, a “radiating arm” that is a quarter of a wavelength long. Ngheim further teaches in claim 1 - *a patch antenna 1 comprising a radiating arm having a length of approximately a multiple of one quarter wavelength of an operating frequency of interest.*

In sharp contrast, the capacitive feed antenna of the invention has a plate size as a non-resonant length that is substantially less than a wavelength.

It is therefore respectfully submitted that Ngheim does not disclose (or suggest), “ a wireless terminal comprising a ground conductor housing, ....., wherein said ground conductor housing is coupled to said antenna feed via a parallel plate capacitor formed by a plate and a

surface of said ground conductor housing, said plate having a non-resonant length substantially less than a wavelength”, as recited in Claim 1 as amended.

Accordingly, it is respectfully requested that the rejection under 35 USC 101 of independent Claim 1 be withdrawn, and independent Claim 1 be allowed.

Claims 2-4 and 7-9 depend from Claim 1, and therefore include the limitations of Claim 1. Hence, for the same reasons given above for Claim 2-4 and 7-9 are believed to contain patentable subject matter. Accordingly, withdrawal of the rejection with respect to Claims 2-4 and 7-9 and allowance thereof are respectfully requested.

Independent Claim 10 recites similar subject matter as Claim 1 and therefore contains the limitations of Claim 1. Hence, for at least the same reasons given for Claim 1, Claim 10 is believed to be allowable over Ngheim. Claim 10 has been further amended to incorporate the limitations of dependent claims 14 and 15.

Accordingly, withdrawal of the rejection under 35 U.S.C. §102(b) and allowance of Claim 10 is respectfully requested.

Claims 11-13 and 16-18 depend from Claim 10, and therefore include the limitations of Claim 10. Hence, for the same reasons given above for Claim 11-13 and 16-18 are believed to contain patentable subject matter. Accordingly, withdrawal of the rejection with respect to Claims 11-13 and 16-18 and allowance thereof are respectfully requested.

### **35 U.S.C. §103(a)**

In the Office Action, Claims 5, 6, 14 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ngheim in view of U.S. Patent No. 6,114,996 – Engbloom.

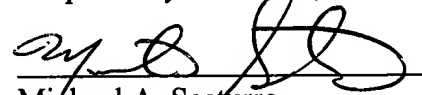
Claims 5-6 and 14-15 depend from independent Claims 1 and 10, respectively, and therefore contains the limitations of Claims 1 and 10. Hence, for at least the same reasons given for Claims 1 and 10, Claims 5-6 and 14-15 are believed to be allowable over the cited references, alone and in combination.

Accordingly, applicants respectfully request that the rejection under 35 U.S.C. §103(a) with respect to Claims 5-6 and 14-15 and allowance thereof is respectfully requested.

### Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-18 are believed to be in condition for allowance and patentably distinguishable over the art of record.

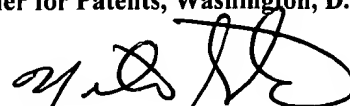
Respectfully submitted,

  
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